

High Quality School Readiness (HQSR): Year 4 Preschool Quality Grants Report (2017/18)

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School Readiness Board
October 31, 2018

HQSR 2017/18 Purpose

- Improve the quality of preschool programs receiving funding under HB96
 - Focus on children at-risk for school failure, defined as eligibility for free/reduced lunch
- Examine student outcomes using the Peabody Picture Vocabulary Test (PPVT) and the Phonological Awareness Literacy Screening (PALS)
 - PPVT is a norm-referenced measure of receptive language skills with strong predictive validity with school success
 - Mean = 100; standard deviation = 15
 - PALS-PreK is a criterion-referenced measure of preschoolers' developing knowledge of important literacy fundamentals
 - Measures name writing, alphabet knowledge, letter sounds, sound awareness, print and word awareness, rhyme awareness
- Assumption: Improvement in PPVT and PALS outcomes are an indicator of preschool quality

HQSR 2017/18 Sample

Site	<i>n</i> = Pre	<i>n</i> = Post	<i>n</i> = Post 4Yrs	<i>n</i> = Post 3 Yrs
Alpine	82	80	65	15
Grand	13	10	10	0
Wasatch	35	33	29	4
<i>School Districts Total</i>	130	123	104	19
Smart Kids	23	18	12	6
Neighborhood House	45	40	26	14
YMCA Ogden – Madison, CLI	45	37	24	13
YMCA Ogden - T.O. Smith*	14	14	9	5
<i>Other providers Total</i>	127	109	71	38
TOTAL	257	232	175	57

*Two children were missed on the pretest report but are included here.

Attrition from pre to post: School Districts – 5.4%, Other – 14.2%; Total – 9.7%

HQSR 2017/18 PPVT - 4-Year Old Group

Site	N	PPVT mean pre	PPVT SD pre	% PPVT pre less than 71	PPVT mean post	PPVT SD post	% PPVT post less than 71
Alpine**	65	95.1	19.0	15.4%	99.1	17.1	4.6%
Grand	10	103.5	23.0	10.0%	99.4	15.2	10.0%
Wasatch	29	95.5	14.3	3.4%	97.8	10.2	0%
<i>School Districts Total*</i>	104	96.0	18.3	11.5%	98.8	15.2	3.8%
Smart Kids*	12	84.2	14.5	8.3%	95.9	11.5	0%
Neighborhood House	26	84.7	11.4	7.7%	88.3	9.4	0%
YMCA Ogden – Madison, CLI**	24	78.2	17.1	25.0%	85.1	18.0	20.8%
YMCA Ogden - T.O. Smith*	9	89.4	16.8	11.1%	93.2	19.6	11.1%
<i>Other providers Total**</i>	71	83.0	14.9	14.1%	89.1	14.8	8.5%
TOTAL**	175	90.7	18.1	12.6%	94.9	15.7	5.7%

**Significant at $p < 0.05$; ** Significant at $p < 0.01$ level*

HQSR 2017/18 PPVT - 4-Year Old Group

Site	N	PPVT mean pre	PPVT SD pre	% PPVT pre less than 71	PPVT mean post	PPVT SD post	% PPVT post less than 71
Alpine**	65	95.1	19.0	15.4%	99.1	17.1	4.6%
Grand	10	103.5	23.0	10.0%	99.4	15.2	10.0%
Wasatch	29	95.5	14.3	3.4%	97.8	10.2	0%
<i>School Districts Total*</i>	104	96.0	18.3	11.5%	98.8	15.2	3.8%
Smart Kids*	12	84.2	14.5	8.3%	95.9	11.5	0%
Neighborhood House	26	84.7	11.4	7.7%	88.3	9.4	0%
YMCA Ogden – Madison, CLI**	24	78.2	17.1	25.0%	85.1	18.0	20.8%
YMCA Ogden - T.O. Smith*	9	89.4	16.8	11.1%	93.2	19.6	11.1%
<i>Other providers Total**</i>	71	83.0	14.9	14.1%	89.1	14.8	8.5%
TOTAL**	175	90.7	18.1	12.6%	94.9	15.7	5.7%

**Significant at $p < 0.05$; ** Significant at $p < 0.01$ level*

HQSR 2017/18 Percentage Change in PPVT Pretest Risk Categories for 4-Year Old Group

		Most Risk		Moderate Risk		Low Risk	
Site	<i>n</i>	% PPVT < 71 Pre	% PPVT < 71 Post	% PPVT > 71 to 85 Pre	% PPVT > 71 to 85 Post	% PPVT > 85 Pre	% PPVT > 85 Post
Alpine	65	15.4	4.6	16.9	18.5	67.7	76.9
Grand	10	10.0	10.0	10.0	10.0	80.0	80.0
Wasatch	29	3.4	0	20.7	16.3	75.9	86.2
<i>Districts Total</i>	104	11.5	3.8	17.3	16.3	71.2	79.8
Smart Kids	12	8.3	0	58.3	16.7	33.3	83.3
Neighborhood House	26	7.7	0	53.8	46.2	38.5	53.8
YMCA Ogden – Madison, CLI	24	25.0	20.8	50.0	33.3	25.0	45.8
YMCA Ogden - T.O. Smith	9	11.1	11.1	11.1	0	77.8	88.9
<i>Other Total</i>	71	14.1	8.5	47.9	31.0	38.0	60.6
<i>TOTAL</i>	175	12.6	5.7	29.7	22.3	57.7	72.0

HQSR 2017/18 PALS (Raw Scores) - 4-Year Old Group

Site	N	PALS Pre	PALS Post	% PALS 4 Yrs Old above cutoff ^
Alpine**	65	51.2	77.7	72.3%
Grand**	10	55.9	79.4	80.0%
Wasatch**	29	29.0	61.3	58.6%
School Districts Total**	104	45.5	73.3	69.2%
Smart Kids**	12	29.6	55.2	41.7%
Neighborhood House**	25	32.1	53.9	42.3%
YMCA Ogden – Madison, CLI**	24	25.8	49.6	33.3%
YMCA Ogden - T.O. Smith**	9	39.2	76.9	77.8%
Other providers Total**	70	30.4	55.6	43.7%
TOTAL**	174	39.4	66.2	58.9%

**Significant at $p < 0.05$; ** Significant at $p < 0.01$ level*

^The PALS developers provide a cutoff score that indicartes readiness for Kindergarten. This cutoff is 47 at posttest based on the test sections administered.

HQSR 2017/18 PALS (Raw Scores) - 4-Year Old Group

Site	N	PALS Pre	PALS Post	% PALS 4 Yrs Old above cutoff ^
Alpine**	65	51.2	77.7	72.3%
Grand**	10	55.9	79.4	80.0%
Wasatch**	29	29.0	61.3	58.6%
<i>School Districts Total**</i>	104	45.5	73.3	69.2%
Smart Kids**	12	29.6	55.2	41.7%
Neighborhood House**	25	32.1	53.9	42.3%
YMCA Ogden – Madison, CLI**	24	25.8	49.6	33.3%
YMCA Ogden - T.O. Smith**	9	39.2	76.9	77.8%
<i>Other providers Total**</i>	70	30.4	55.6	43.7%
TOTAL**	174	39.4	66.2	58.9%

**Significant at $p < 0.05$; ** Significant at $p < 0.01$ level*

^The PALS developers provide a cutoff score that indicartes readiness for Kindergarten. This cutoff is 47 at posttest based on the test sections administered.

HQSR 2017/18 Statistically Significant Pre to Post *PPVT* Differences for 4-Year Olds by Program and Child Risk Level

Combined Sites	All Children	Most Risk	Moderate Risk	Low Risk
<i>School Districts</i>	$p < .05$ (n=104)	$p < .01$ (n=12)	$p < .01$ (n=18)	NS (n=74)
<i>Other Providers</i>	$p < .01$ (n=71)	$p < .05$ (n=10)	$p < .01$ (n=34)	NS (n=27)
<i>TOTAL</i>	$p < .01$ (n=175)	$p < .01$ (n=22)	$p < .01$ (n=52)	NS (n=101)

HQSR 2017/18 *PALS* Percent Ready for Kindergarten at Post by Risk Group at Pre

Combined Sites	All Children	Most Risk	Moderate Risk	Low Risk
<i>School Districts</i>	69.2% (n=104)	25.0% (n=12)	72.3% (n=18)	75.7% (n=74)
<i>Other Providers</i>	43.7% (n=71)	0% (n=10)	41.2% (n=34)	63.0% (n=27)
<i>TOTAL</i>	58.9% (n=175)	13.6% (n=22)	51.9% (n=52)	72.3% (n=101)

Note: All pre to post differences on the PALS are statistically significant.

HQSR 2017/18 PPVT - 3-Year Old Group

Site	N	PPVT mean pre	PPVT SD pre	% PPVT pre less than 71	PPVT mean post	PPVT SD post	% PPVT post less than 71
Alpine	15	100.1	8.6	0%	100.9	13.1	0%
Grand	0	-	-	-	-	-	-
Wasatch	4	76.2	24.3	25.0%	73.0	32.1	25%
<i>School Districts Total</i>	19	95.1	16.0	5.3%	95.0	21.0	5.3%
Smart Kids	6	78.3	14.5	16.7%	85.5	12.5	16.7%
Neighborhood House	14	85.6	17.6	14.3%	86.9	19.8	21.4%
YMCA Ogden – Madison, CLI*	13	82.8	9.9	7.7%	88.9	12.4	7.7%
YMCA Ogden - T.O. Smith	5	82.0	14.8	20.0%	85.8	25.9	40%
<i>Other providers Total*</i>	38	83.0	14.1	13.2%	87.2	16.8	18.4%
TOTAL	57	87.0	15.7	10.5%	89.8	18.5	14.0%

**Significant at $p < 0.05$; ** Significant at $p < 0.01$ level*

HQSR 2017/18 Overall Summary (Part 1)

- The majority of children served were 4-year olds-75%
 - 3-year olds were a small percentage of all programs
 - Attrition from pre to post was minimal – 10%
- Programs were challenged in finding the most at-risk children
 - Only 12.6% of 4-year olds and 10.5% of 3-year olds were in the most risk category
 - The mean PPVT scores for school districts was average for the population
 - The mean PPVT scores for the other providers was one standard deviation below the mean
 - These would be considered children moderate risk
 - 3-year old children's PPVT scores were in the moderate risk category (except for Alpine)

HQSR 2017/18 Overall Summary (Part 2)

- Four of 7 programs had statistically significant gains on PPVT pre to post scores for 4-year old children
 - Statistically significant gains were due to progress by children at moderate and most risk
 - Low risk PPVT score gains were overall not significant
- Only one program had statistically significant gains of PPVT pre to post scores for 3-year old children
- All programs made statistically significant gains on the PALS
 - However, only 2 programs had 75% or more of the children ready for Kindergarten based on PALS criteria
 - Combining scores by program type found fewer than 60% of moderate risk children ready for Kindergarten (with one exception)
 - 25% or less for most at-risk children

HQSR 2017/18

PPVT Results Across Four Years – Focus on 4-Year Olds

HQSR School Districts: PPVT Pre Scores for 4-Year Olds and Percent Students with PPVT Scores in the Most Risk Group

	2014/15			2015/16			2016/17			2017/18		
Site	<i>n</i>	PPVT mean pre	% ≤ PPVT 70	<i>n</i>	PPVT mean pre	% ≤ PPVT 70 pre	<i>n</i>	PPVT mean pre	% ≤ PPVT 70 at Pretest	<i>n</i>	PPVT mean pre	% ≤ PPVT 70 at Pretest
Alpine										65	95.1**	15.4%
Canyons	68	95.8	11.8%	34	85.4*	26.5%	37	88.8**	27%			
Davis	163	100.2**	3.1%	93	102.3	2.2%						
Grand				21	100.5	9.5%	13	100.5	0%	10	103.5	10.0%
Logan				145	88.7**	8.3%	136	90.7**	9%			
Salt Lake	274	83.8**	22.7%	187	85.6**	23.5%						
Washington	255	100.4**	4.7%	187	102.4**	2.1%						
Wasatch							11	105.9	0%	29	95.5	0%

Statistically significant change from pre to post on PPVT: *Significant at $p < 0.05$; ** Significant at $p < 0.01$ level

HQSR School Districts: PPVT Pre Scores for 4-Year Olds and Percent Students with PPVT Scores in the Most Risk Group

	2014/15			2015/16			2016/17			2017/18		
Site	<i>n</i>	PPVT mean pre	% ≤ PPVT 70	<i>n</i>	PPVT mean pre	% ≤ PPVT 70 pre	<i>n</i>	PPVT mean pre	% ≤ PPVT 70 at Pretest	<i>n</i>	PPVT mean pre	% ≤ PPVT 70 at Pretest
Alpine										65	95.1**	15.4%
Canyons	68	95.8	11.8%	34	85.4*	26.5%	37	88.8**	27%			
Davis	163	100.2**	3.1%	93	102.3	2.2%						
Grand				21	100.5	9.5%	13	100.5	0%	10	103.5	10.0%
Logan				145	88.7**	8.3%	136	90.7**	9%			
Salt Lake	274	83.8**	22.7%	187	85.6**	23.5%						
Washington	255	100.4**	4.7%	187	102.4**	2.1%						
Wasatch							11	105.9	0%	29	95.5	0%

Statistically significant change from pre to post on PPVT: *Significant at $p < 0.05$; ** Significant at $p < 0.01$ level

Of 17 analyses, 10 found statistically significant differences between pre and post. The 4 sites with highest percent of most risk children were all statistically significant.

HQSR Non-District Sites: PPVT Pre Scores for 4-Year Olds and Percent Students with PPVT Scores in the Most Risk Group

	2014/15			2015/16			2016/17			2017/18		
Site	n	PPVT mean pre	% LE PPVT 70	n	PPVT mean pre	% LE PPVT 70 at Pre	n	PPVT mean pre	% LE PPVT 70 at Pre	n	PPVT mean pre	% LE PPVT 70 at Pre
Learning Tree	13	95.5	7.7%	44	100.3*	2.3%	18	102.7	0%			
Smart Kids	6	87.2	0%	22	100	0%	7	83.1	14%	12	84.2*	8.3%
UpStart	26	106.6	0%	10	98.5	0%						
YMCA Ogden				19	80.2	26.3%	12	81.2	17%	33	81.3**	21.2%
Lit 'l Scholars	8	105.8	0%	7	98.7	0%	1	118	0%			
Walden	5	93.4	0%	5	101	0%	6	108.8	0%			
Salt Lake HS	210	88.8**	13.3%									
Neighborhood House							23	80.6**	26%	26	84.7	11.5%

Statistically significant change from pre to post on PPVT: *Significant at $p < 0.05$; ** Significant at $p < 0.01$ level

HQSR Non-District Sites: PPVT Pre Scores for 4-Year Olds and Percent Students with PPVT Scores in the Most Risk Group

	2014/15			2015/16			2016/17			2017/18		
Site	n	PPVT mean pre	% LE PPVT 70	n	PPVT mean pre	% LE PPVT 70 at Pre	n	PPVT mean pre	% LE PPVT 70 at Pre	n	PPVT mean pre	% LE PPVT 70 at Pre
Learning Tree	13	95.5	7.7%	44	100.3*	2.3%	18	102.7	0%			
Smart Kids	6	87.2	0%	22	100	0%	7	83.1	14%	12	84.2*	8.3%
UpStart	26	106.6	0%	10	98.5	0%						
YMCA Ogden				19	80.2	26.3%	12	81.2	17%	33	81.3**	21.2%
Lit 'l Scholars	8	105.8	0%	7	98.7	0%	1	118	0%			
Walden	5	93.4	0%	5	101	0%	6	108.8	0%			
Salt Lake HS	210	88.8**	13.3%									
Neighborhood House							23	80.6**	26%	26	84.7	11.5%

Statistically significant change from pre to post on PPVT: *Significant at $p < 0.05$; ** Significant at $p < 0.01$ level

Of 21 analyses, 5 found statistically significant differences between pre and post; 8 sites had samples too small for analysis. 2 of the 3 sites with highest percent of most risk children were statistically significant.

HQSR School Districts: PALS Ready for Kindergarten for 4-Year Olds by Program

	2015/16	2016/17	2017/18
Site	% PALS K ready	% PALS K ready	% PALS K ready
Alpine			72%
Canyons	29%	49%	
Davis	55%		
Grand	57%	54%	80%
Logan	62%	68%	
SLC	50%		
Washington	90%		
Wasatch		46%	59%

The PALS developers provide a cutoff score that indicates readiness for Kindergarten. This cutoff is 47 based on the test sections administered.

All PALS pre to post score analyses are statistically significant. Of more importance are the percentage ready for Kindergarten.

HQSR School Districts: PALS Ready for Kindergarten for 4-Year Olds by Program

	2015/16	2016/17	2017/18
Site	% PALS K ready	% PALS K ready	% PALS K ready
Alpine			72%
Canyons	29%	49%	
Davis	55%		
Grand	57%	54%	80%
Logan	62%	68%	
SLC	50%		
Washington	90%		
Wasatch		46%	59%

The PALS developers provide a cutoff score that indicates readiness for Kindergarten. This cutoff is 47 based on the test sections administered.

All PALS pre to post score analyses are statistically significant. Of more importance are the percentage ready for Kindergarten. Only 2 of 13 analyses meet a criteria of 75% of children ready for Kindergarten.

HQSR Non-Districts Sites: PALS Ready for Kindergarten for 4-Year Olds by Program

	2015/16	2016/17	2017/18
Site	% PALS ready for K	% PALS ready for K	% PALS ready for K
Lit 'l Scholars	86%	100%	
Learning Tree	84%	89%	
Neighborhood House		35%	42%
Smart Kids	77%	29%	41%
Walden	60%	83%	
YMCA Ogden	32%	67%	46%
UpStart	60%		

The PALS developers provide a cutoff score that indicartes readiness for Kindergarten. This cutoff is 47 based on the test sections administered.

All PALS pre to post score analyses are statistically significant. Of more importance are the percentage ready for Kindergarten.

HQSR Non-Districts Sites: PALS Ready for Kindergarten* for 4-Year Olds by Program

	2015/16	2016/17	2017/18
Site	% PALS ready for K	% PALS ready for K	% PALS ready for K
Lit 'l Scholars	86%	100%	
Learning Tree	84%	89%	
Neighborhood House		35%	42%
Smart Kids	77%	29%	41%
Walden	60%	83%	
YMCA Ogden	32%	67%	46%
UpStart	60%		

The PALS developers provide a cutoff score that indicates readiness for Kindergarten. This cutoff is 47 based on the test sections administered.

All PALS pre to post score analyses are statistically significant. Of more importance are the percentage ready for Kindergarten. Only 6 of 15 analyses meet a criteria of 75% of children ready for Kindergarten; some samples are small in number of students.

HQSR 2017/18: Four Year Summary

- Programs are not identifying the most at-risk children
 - Majority of PPVT pretest scores are in the typically developing or moderate risk range
- Program effects on PPVT scores vary but impacts are limited
 - Statistically significant increases in PPVT scores are more likely for school district programs
 - Rare for non-district programs
 - Statistically significant differences when found occur primarily for total sample and high risk sample
- Program effects on PALS scores show statistically significant growth but most children not ready for Kindergarten